

# Climate finance and water security

## What are the opportunities for increased WASH financing?

### Key messages

1. Enhancing the water security of people and communities, including ensuring they have access to sustainable and resilient water, sanitation and hygiene services, is a critical component of climate-compatible development. Analysis of climate finance flows to date shows that the water sector is not fully using the funds available to support adaptation to climate change.
2. The effectiveness of national institutions and the prominence given to water security in policy are closely aligned with the number and scale of water security projects secured. Poor sector coordination, fragmented responsibilities for water, and non-existent or unimplemented water security frameworks make it difficult for governments to develop coherent, large-scale and high-impact water security project proposals.
3. There is a role for international organisations to play in building the capacities of the least developed countries to plan for, access, deliver, and monitor and report on climate finance, both international and domestic, in ways that are catalytic and fully integrated with national development priorities.

### Introduction

This briefing outlines key findings and recommendations stemming from the '*Climate finance and water security*' research project. The study identified the type and scale of national and sub-national programmes and projects that have been funded by climate finance. This was followed by an analysis of how each relates to local water security.

Three country case studies in Bangladesh, Ethiopia and Zambia formed an integral part of the research. In each country a review of the secondary literature on water security, and climate change trends, policy and finance, was followed by key informant interviews with water and climate change stakeholders to gain insights into local policy and knowledge about water security and climate finance. Finally, project-level data from the Climate Finance Update (CFU) and the OECD DAC Creditor Reporting System was analysed.

The results of the research will be used to inform a new WaterAid initiative that aims to ensure increasing volumes of international climate finance are being directed towards the water security and water, sanitation and hygiene (WASH) needs of those who are most vulnerable to the impacts of climate change.<sup>1</sup>

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<sup>1</sup> This report summarises the findings from research commissioned by WaterAid and carried out by Oxford Policy Management. For detail on the methodology, definitions, case study findings and interview results please see the Inception Report, the Synthesis Report and the individual case study reports for Bangladesh, Ethiopia and Zambia which are available on the WaterAid website.

## Rationale

The link between climate change and water security is evident. As described in the Intergovernmental Panel on Climate Change (IPCC) 5<sup>th</sup> Assessment Report, changing patterns of rainfall and melting snow and ice are altering freshwater systems, affecting the quantity and quality of water available in many regions. In terms of climate projections, droughts and floods are likely to increase and coastal systems will be affected by submersion, coastal flooding and sea level rise. Both population growth and economic development, especially in poor and middle-income developing countries, will reinforce the negative effects of climate change.

Enhancing the water security of people and communities, including ensuring they have access to sustainable and resilient WASH, is a critical component of the climate-compatible development that is needed to help people adapt to change. All progress made in extending access to WASH, in addition to improved WASH approaches (such as flood-resilient sanitation systems and improved early-warning systems for disasters) effectively builds resilience to climatic variability and change. It is therefore both logical and necessary that a significant proportion of international climate finance flows is directed towards the enhancement of water security, and that within all water security projects the basic drinking and sanitation needs of poor people are prioritised.

To date, however, the priorities of the international community have not meaningfully included water security or WASH. Developed countries pledged to provide US \$30 billion of fast-start finance between 2010 and 2012 and to jointly mobilise \$100 billion per year by 2020 to address key adaptation and mitigation needs of developing countries. Early evidence shows that most of the climate finance flows thus far have been directed to greenhouse gas mitigation activities. Adaptation activities, which generally encompass water-related projects, have received relatively little attention.

This study therefore aims to explore the climate finance–water security nexus in more detail, unpacking the complex and evolving climate finance landscape to understand how it relates to water security. Through in-country case studies, the study also aims to identify the types of projects that have been financed and how, as well as the opportunities for climate financing in the future. The results will be used to start developing the effective policy and programming instruments needed to better integrate water security and WASH into climate change adaptation programmes, and therefore ensure that future climate finance is used to reduce the water-related vulnerabilities of poor people.

This paper is designed for both international and national WASH practitioners, as well as decision makers responsible for devising national and global climate change policies and all those seeking to improve the efficiency of climate change funding and the effectiveness of investments.

## Research findings<sup>2</sup>

### **Developing countries are highly vulnerable to climatic variability and change, particularly that which manifests in the water cycle.**

In Zambia, for example, flood and drought are predicted to increase, both of which have already led to widespread crop failure through waterlogging and delays with the onset and length of the growing season. In Ethiopia, increasing frequency of severe droughts and floods will subsequently have a negative impact on human and livestock health, food security and land degradation. In low-lying coastal Bangladesh, an increase in extreme events such as floods, heavy rains, cyclones and storm surges, in addition to steady sea-level rise, will put lives and water-dependent livelihoods at ever-greater risk. In all three case study countries, the impacts of climate change on water availability are compounded by poor governance, rapid population growth and over-abstraction of groundwater resources.

### **In the case study countries there is no single definition or framework for water security, and responsibilities are highly fragmented at national and sub-national levels.**

All three case study countries currently lack a universal definition of water security. In Zambia, for example the prevailing definition of water security is the one used by the donor who provides the funding. Additionally, responsibilities for water security are highly fragmented, mainly due to there being no effective over-arching policy for water security. Most countries have a national water policy, but generally lack the institutions, sector coordination, financing mechanisms and monitoring that are needed for the policy to change the way in which water is allocated and used. The absence of a clear strategy and objectives for water security makes it difficult for international funders to align resources with country vulnerabilities and adaptation needs.

### **Analysis of climate finance flows to date shows that the prominence given to water security in national policy is closely aligned with the number and scale of water security projects secured. Only in Bangladesh, where water security (including WASH) has been identified as a strategic priority in national policy frameworks, have funds directly addressed the issue at scale.**

Each country has sought to mainstream climate concerns into their national development strategies and develop specific climate change legislation setting out thematic priorities. However, climate change and climate finance policy in the three case study countries are at very different stages of development.

In Ethiopia, climate policy is guided by the Climate Resilient Green Economy strategy, which is itself being implemented into the Growth and Transformation Plan (GTP II). The Climate Resilient Green Economy strategy frames water security mostly through the agriculture and energy sectors, and WASH does not appear as a strategic focus. Of the 20

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<sup>2</sup> These findings are from the key informant interviews in Bangladesh, Ethiopia and Zambia only.

projects in the CFU database, only one is directly related to WASH, corresponding to 9% of total funds. There are two projects related to water resources more broadly, which encompass 2.6% of total funds approved. Although the CFU database is probably underestimating the total climate finance in Ethiopia, the findings are consistent with the expert interviews, and can be explained in part by a lack of a national framework for water security.

Zambia submitted a National Adaptation Programme of Action (NAPA) in 2007; however, most of the projects (one of which was for climate proofing sanitation) were never financed because of a lack of detail in the projects themselves, underscoring the need for international climate funds to provide adequate readiness and project preparation support. Apart from water being identified as a 'vulnerable sector', water security has not been taken forward in more recent policy iterations (such as the National Climate Policy) and the Ministry of Local Government and Housing (responsible for WASH) does not participate in the Climate Secretariat. To date, only two projects that are related to water security have been approved, amounting to a total of \$3.5 million, or 3.5% of total climate finance. Policy instruments and legal frameworks for both climate finance and water security are still incipient.

Of the three countries, only in Bangladesh, which has a long history of climate mainstreaming with regard to the water sector, has WASH emerged as a clear climate policy objective (for international funds). Both NAPAs (2005 and 2009) recognised the need to develop a comprehensive strategy for safe drinking water supply in coastal areas. The more recent Bangladesh Climate Change Strategy and Action Plan (2009) lists 'implement drinking water and sanitation programmes in areas at risk from climate change (e.g. coastal areas, flood-prone and drought-prone areas)' as a key objective.

Water projects also make up the majority of overall reported funding by **dedicated climate funds** in Bangladesh. The largest water-relevant project is the Khulna Water Supply Project, funded by the Asian Development Bank (ADB), the Japanese International Cooperation Agency (JICA) and the Government of Bangladesh, to a total of \$364 million. This is accompanied by an ADB-financed Coastal Towns Infrastructure Improvement Project for a total of \$117 million. It is worth noting, however, that dedicated climate funds represent only a small part of overall climate finance flows, and WASH is not seen as a major priority for **national** funds.

**Table 1: Categorisation of climate finance projects**

Category	Bangladesh		Ethiopia		Zambia	
	No. of projects	Finance approved (US millions)	No. of projects	Finance approved (US millions)	No. of projects	Finance approved (US millions)
A	3	\$190	1	\$11	1	\$0.03
B	0	\$0	2	\$3	1	\$3
C	1	\$6	2	\$20	4	\$81
D	18	\$293	15	\$89	6	\$21

A = WASH projects; B = Water security; C = Water-related; D = Unrelated to water.

Source: OPM, 2015. Climate Finance and Water Security Synthesis Report.

**Although Bangladesh demonstrates that national policies and institutions can help secure funding for large WASH projects from the international community, policy weaknesses remain.**

Although Bangladesh has secured finance for a number of large-scale water projects, the bulk of international climate finance is allocated to projects that are not related to water (60% of the total resources approved). Of an envisaged investment requirement of approximately \$5 billion in climate-sensitive activities for the period 2009-13, Bangladesh has only leveraged approximately \$1 billion.

There are a number of weaknesses in climate policy and procedure in Bangladesh. Most fundamentally, allowing each intermediary to focus on its area of expertise has resulted in a fragmented and 'projectised' finance landscape, which has contributed to a lack of consensus on basic climate finance concepts and strategies. This underscores the need for leadership and political commitment. Fragmentation has created a greater need for institutional arrangements that have a mandate to coordinate activities between different stakeholders. Current projects are relatively narrowly targeted, and scope remains for up-scaling and expanding such activities.

**Overall, projects that address water security (including WASH) remain only a small proportion of total climate financing approved in each country.**

Water and hydrological issues are at the centre of climate change impacts; however, climate finance trends do not reflect this reality. Global estimations in the research indicate that the total funds allocated to water security within adaptation since 2003 amount to \$574.1 million, or 16.7% of the total funds allocated to adaptation activities.<sup>3</sup> In terms of the case study countries, Zambia and Ethiopia have water security spending of just 3% and

<sup>3</sup> Note this is likely to be an underestimation as it is the result of a name search that may have missed some water security projects. In fact, the CPI database, which uses a much broader definition of climate finance, has found that 44% of adaptation funds relate to water supply and management.

11% respectively of overall climate finance. Bangladesh's spending is slightly higher at 39%, but this does not reflect the very high levels of water-related vulnerability.

Table 2 shows the amounts approved for water security projects as a proportion of both total adaptation and total climate finance. Because of the high vulnerability of coastal areas in Bangladesh, water security projects encompass 62% of total adaptation funds and 39% of total climate finance. Water security projects are less significant in both Ethiopia and Zambia, encompassing 28% and just 4% of total adaptation funds, respectively.

**Table 2: Approvals for water security as a proportion of total funding (2003-14)**

% Funds	Bangladesh	Ethiopia	Zambia
Approved/total adaptation	62%	28%	4%
Approved/total climate finance	39%	11%	3%

Source: CFU (2014).

### **The relationship between WASH, water security, and resilience to climate change is not well understood nor prioritised by most donors or policy makers.**

Several of the in-country stakeholders interviewed stated that the links between water security and climate change are unclear. This may be one of the reasons why many donors and government officials reported that water security (and, in particular, WASH) were not priorities in their climate change adaptation programmes. The European Union, for example, focuses its climate attention on transport and energy in Zambia. The German aid agency (GIZ) focuses on land management and climate-smart agriculture. Ethiopia's Climate Resilient Green Economy strategy views water security primarily through an agriculture lens, and in Zambia water is viewed by the government as a strategic energy resource because of the high dependence on hydropower. Although these sectors will all be affected by climate change, and efforts to increase their resilience must continue, it is not acceptable that energy and livelihood vulnerabilities are given a higher priority than is the basic human right to water for drinking, sanitation and hygiene. This underscores the need to build a coherent understanding of the links between water security and climate resilience among all stakeholders involved in national policy making and funding disbursement.

### **Actual disbursement of approved climate finance is extremely low.**

Developed countries have so far pledged \$38 billion since 2003; however, only 59% of this money (\$22.2 billion) has been approved, and just 8% (\$3.1 billion) disbursed. This is due to a range of supply and demand issues, such as the confused and rapidly evolving climate finance infrastructure, climate change not being mainstreamed into national policy, a lack of high-level leadership, inability to design and implement projects and generally low levels of absorptive capacity.



**Table 3: Approvals and disbursements for water security (2003-14)**

Funds (US million)	Bangladesh	Ethiopia	Zambia
Approved	\$196	\$34	\$84
Disbursed	\$0	\$6	\$6
% disbursed	0%	18%	8%

Source: CFU (2014).

For all countries, disbursement rates tend to be higher for projects related to the development of national structures and plans, such as the National Adaptation Programme for Action (NAPA) in both Bangladesh and Zambia or the design of the Strategic Programme for Climate Resilience (SPCR) in Zambia.

**A number of bottlenecks need to be addressed before international climate finance for water security can be more readily secured.**

The challenges and sector blockages preventing increased flows of climate finance to water security are not unfamiliar. At the country level, poor sector coordination, fragmented responsibilities for water, and non-existent or unimplemented water security frameworks make it difficult for governments to develop coherent, large-scale and high-impact water security project proposals. This is compounded by low levels of technical and implementation capacity, in addition to confusion with regard to the types of projects that will qualify for climate finance.

At the international level, donors and their disbursement decisions are often regarded as opaque and therefore unaccountable to potential beneficiaries. The rapidly evolving and highly complex international climate finance architecture makes it difficult for countries to keep track of what funding is available, or to monitor the effectiveness of the funding that has been approved. The multitude of different funds at the global level also presents challenges to countries that are trying to develop the domestic institutions needed to secure the funds that are available.

**International climate finance is a small but important subset of overall finance flows, and must be viewed in the context of other climate-relevant funding.**

It is not sufficient to look at climate finance in isolation. In all three countries climate finance funds are only a small portion of climate-relevant investment. Climate-relevant Official Development Assistance (ODA), national sector budgets and private sector finance play large roles. For instance, in 2013 the size of climate-relevant ODA was more than four times that provided by climate funds for the entire period since 2003. On the basis of a review of climate finance alone, therefore, it is not possible to determine to what extent overall funding for water security and WASH can address the impacts of climate change, particularly for poor people. The scale of climate funds is nonetheless significant and set to

grow exponentially if commitments made under the UNFCCC process are met. Efforts must be made to ensure dedicated climate funds are spent effectively and according to climate vulnerability and basic needs.

**The Green Climate Fund (GCF) will make its first disbursement decisions in November 2015, but water security has not been identified as one of its five investment priorities.**

At a recent board meeting<sup>4</sup> the GCF approved five thematic and geographic investment priorities: cities; agriculture; forestry; small islands and developing states (SIDS) resilience; and energy generation and access. This guidance was designed to provide direction to project developers to ensure the relevance of project proposals. Although water was not included explicitly as one of the five investment priorities, water considerations are implicit in the first four of these in one form or another. Given that the GCF will be, to a great extent, country-driven, there is the danger that those governments with programme concepts related to water and sanitation might choose not to bring these forward unless given explicit guidance to do so by the GCF, instead prioritising proposals more closely aligned with the priorities set out above.

**The existing tools do not fully enable tracking and monitoring of climate finance.**

Tracking and monitoring climate finance is extremely difficult. Globally, there is not one single tracking system, but rather different initiatives with different purposes that track different projects and flows. This complexity is expected to continue, at least until there is more clarity at the international level on a universal definition of climate finance, and methods for monitoring and reporting are established. At country level, fragmented policies and procedures on climate management, general knowledge issues and oversights in the national budget process mean that accurate tracking is impossible. In addition, there is no clear cut delineation between 'adaptation' and 'development' funds, and disbursement chains are highly complex.

It is important to note that the current lack of universality in the tracking system means that vastly different fund estimates can be found, depending on the source used. The two main tracking platforms – Climate Funds Update (CFU) and CPI (Climate Policy Initiative) – define climate finance differently. According to CFU, total amounts pledged for climate finance are around \$38 billion since 2003, whereas CPI reports that, in 2012, global climate finance reached approximately \$359 billion (\$22 billion for adaptation and \$337 billion for mitigation). This difference is explained by that fact that CPI tracks all money spent in both developed and developing countries on climate change activities in a specific year, both public and private, while CFU tracks climate finance flows from developed to developing countries as part of international UNFCCC commitments through various mechanisms, and presents cumulative data. For the present research, CFU data was used because it has the most complete project-level data, is open access and available for all countries.

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## Recommendations for policy makers and other national stakeholders.

### 1. Climate change adaptation and finance needs must be mainstreamed into national development policy.

- Climate change is much more than an environmental issue. It is intimately related to poverty eradication and development. Mainstreaming of climate change adaptation and finance into planning and development policy is essential to achieving the economy-wide transformation that is needed to meet the Sustainable Development Goals in a changing climate.

### 2. All stakeholders should ensure that WASH and water security are clear priorities in national policy frameworks.

- Strategies that address climate change by enhancing community water security (for example by ensuring access to sustainable, climate-resilient WASH) should be mainstreamed into national development and poverty-eradication plans.
- National policy should ensure that poor people are prioritised, specifically with regard to their need for essential basic services. The use of existing tools, such as vulnerability and needs assessments, can be used to build a case for where climate finance spending will have the greatest impact.

### 3. National governments should consider how WASH activities might be better integrated into both climate policy and national climate finance architecture where relevant.

- Significant work is required to ensure that water security is considered a mainstream concept in the climate resilience agenda. Practically, this will involve ensuring that agencies responsible for WASH activities are included in climate finance governance structures and sector planning processes (e.g. the Climate-Resilient Green Economy strategy in Ethiopia), and that they are accredited for access to the GCF. This may involve blending support to WASH-type activities from both existing sector development budgets and national climate funds, as well as promoting mainstreaming of the resilience agenda into water sector planning.
- Dedicated windows for WASH-type activities might be considered within climate finance structures (both for government and non-government stakeholders).
- Consideration should be given to mainstreaming WASH considerations into larger agriculture or energy projects (e.g. multi-purpose dams), where these are the primary sectoral focus for resilience spending.

### 4. All stakeholders should help to build an evidence base that demonstrates how WASH builds resilience to climatic threats and is therefore an example of climate-compatible development eligible for climate funding.

- As climate change is not a sector but rather a threat that cuts across all sectors, decision makers across a range of thematic areas must understand how water security and climate change are related, and how access to WASH builds community resilience. All stakeholders, and the WASH sector in particular, can play a role in promoting a better understanding of the linkages between WASH and climate change, and encourage mainstreaming in this area.

## 5. Non-government stakeholders should help increase country-level demand for climate finance that enhances water security.

- Entry points into national policy dialogue should be sought, such as the restructuring of the national climate funds in Bangladesh, the Climate Resilient Green Economy strategy and Growth and Transformation Plan process in Ethiopia, and the National Climate Policy process in Zambia. The GCF accreditation processes in all three countries provides a window of opportunity to influence prioritisation and financing strategy.
- Stakeholders can work together to establish a consortium that ensures WASH and wider water security issues are adequately reflected in policy frameworks. They can also offer to support strategic applications for water-related climate finance being prepared by government or other actors.
- Non-government stakeholders also play an important role in tracking and evaluating climate finance spending, and should advocate for the improvement of available tracking systems.

## Recommendations for international policy makers<sup>5</sup>

### 1. International policy makers should promote nationally-owned and locally-owned adaptation processes, and target countries whose ability to meet the Sustainable Development Goals will be most hampered by climate change.

- Donors must support national climate change policy and planning as an integral part of developing countries' overall national development plans, and ensure that these measures are financed, delivered and monitored through country-owned systems.
- Donors must prioritise countries with high levels of climate vulnerability, and encourage national governments to prioritise the poorest and most climate-vulnerable people and communities.

### 2. International organisations (donors, development banks, etc.) can ensure that the impacts of climate change on WASH, and the co-benefits arising from WASH programmes (resilience, health, livelihoods), have sufficient priority.

- International organisations should promote the WASH and water security agenda within the international climate finance architecture (e.g. Green Climate Fund, Climate Investment Funds, Global Environment Facility) using both their contributions and their influence in the governance structures.
- International organisations should promote effective governance of the WASH sector as a legitimate resilience-building and adaptation strategy, and, in turn, invest in strengthening the systems needed to facilitate adaptation in the water sector and to sustain any resilience improvements.
- International organisations should promote the use of climate funds as a way of strengthening government systems and ensuring high-quality WASH service delivery, rather than substituting or displacing existing national funding.

<sup>5</sup> UN (e.g. UNFCCC, UNEP, UNDP), global climate funds (e.g. Green Climate Fund, Climate Investment Funds), donor governments, development banks and other multilaterals.

### **3. All developed countries must follow through on the climate finance commitments made under the UNFCCC.**

- At Conference of the Parties 15 in Copenhagen in 2009, developed countries committed to a goal of jointly mobilising \$100 billion per year in climate finance from 2020 onwards. Six years have now passed since the commitments were made, yet ambiguity remains on the sources, instruments and channels that will enable developed countries to achieve this goal. Designing a realistic and politically acceptable pathway to \$100 billion is essential to build confidence and trust among all countries, both of which are essential to a strong Paris agreement.
- Climate finance pledges should be in addition to, not part of, 0.7% ODA commitments.

### **4. Absorption and readiness support is paramount.**

- Efforts are required to build the capacities of countries to plan for, access, deliver, and monitor and report on climate finance, both international and domestic, in ways that are catalytic and fully integrated with national development priorities. Disbursement rates below 8% show that more support is needed.
- Mechanisms specifically designed to help the least developed countries prepare bankable projects that target water security needs of poor and marginalised people are needed. This includes strengthening local-level institutions to implement approved climate finance projects. This must begin with ensuring countries understand climate finance and the potential opportunities it provides to support climate-compatible development.

### **5. Processes to allow accurate tracking and monitoring of climate finance flows for adaptation must be simplified.**

- The common principles for tracking adaptation finance recently developed by the multilateral development banks and the International Development Finance Club are a welcome first step towards simplification of the climate finance tracking system.<sup>6</sup>
- Universally agreed definitions, plus consistent markers, indicators, and codes to characterise financial data (e.g. by sector and activity), are still needed.
- Dedicated support to developing countries is required to help them navigate complex financial landscapes to access, manage, deliver, track and report on different forms of finance.

### **6. The GCF must clarify how WASH activities will fit into their five investment priorities.**

- The GCF's recently announced thematic priorities – cities, agriculture, forestry, SIDS resilience and energy generation or access – do not explicitly include water, although it is implicit in the first four in particular. The GCF must provide clear guidance to countries to ensure they understand how water-related projects fit within their overall objectives.

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<sup>6</sup> Accessible at: <http://pubdocs.worldbank.org/pubdocs/publicdoc/2015/7/222771436376720470/010-gcc-mdb-idfc-adaptation-common-principles.pdf>